

I. AMENDMENT

In the Claims:

Please amend the claims as follows:

1. (currently amended) A scanner, comprising:
a beam generator operable to generate a scan beam;
a beam-reflector assembly having a first magnet and operable to sweep the scan beam; and
a beam-sweep mechanism having a permanent second magnet and operable to activate the beam-reflector assembly by exerting a first magnetic force and only the first magnetic force on the ~~first magnet~~ beam-reflector assembly.
2. (original) The scanner of claim 1 wherein the beam generator comprises a laser diode.
3. (previously presented) The scanner of claim 1, further comprising a beam detector operable to read a return beam reflected from a target.
4. (original) The scanner of claim 1 wherein the beam-reflector assembly:
comprises a multi-faceted mirror that is operable to reflect the scan beam onto a target; and
is operable to rotate the mirror to sweep the scan beam across the target when the beam-reflector assembly is activated by the beam-sweep mechanism.
5. (currently amended) The scanner of claim 1 wherein:
the beam-reflector assembly comprises a shaft; and
the beam-sweep mechanism causes the beam-reflector assembly to rotate back and forth about the shaft by exerting the first magnetic force on the first magnet with the second magnet.

6. (currently amended) The scanner of claim 1 wherein:
the beam-reflector assembly comprises a shaft; and
the beam-sweep mechanism causes the beam-reflector assembly to rotate back and forth about the shaft and damps the rotation by exerting the first magnetic force on the first magnet with the second magnet.

7. (previously presented) The scanner of claim 1 wherein the beam-sweep mechanism deactivates the beam-reflector assembly by exerting a second magnetic force on the first magnet with the second magnet, the second magnetic force being opposite to the first magnetic force.

8. (previously presented) The scanner of claim 1 wherein before activating the beam-reflector assembly, the beam-sweep mechanism is operable to retain the beam-reflector assembly in a home position by exerting a second magnetic force on the first magnet with the second magnet, the second magnetic force being opposite to the first magnetic force.

9. (currently amended) The scanner of claim 1 wherein:
the beam-reflector assembly comprises a shaft; and
the beam-sweep mechanism;

causes the beam-reflector assembly to rotate back and forth about the shaft by exerting the first magnetic force on the first magnet with the second magnet; and

causes the beam-reflector assembly to return to a home position by exerting a second magnetic force on the first magnet with the second magnet, the second magnetic force being opposite to the first magnetic force.

10. (currently amended) A scanner, comprising:
a beam generator operable to generate a scan beam;
a beam detector operable to read a return beam reflected from a target;
a beam-reflector assembly having a mirror, a shaft, and a first magnet, the mirror operable to sweep the scan beam across the target; and

a beam-sweep mechanism having a second magnet and operable to,
retain the mirror of the beam-reflector assembly in and return the mirror to a
home position by attracting the first magnet with the second magnet, and
rotate the mirror of the beam-reflector assembly back and forth about the
shaft in an underdamped manner by repelling the first magnet with the second
magnet.

11. (original) The scanner of claim 10 wherein the mirror of the beam-reflector
assembly is operable to direct the return beam to the beam detector while sweeping the
scan beam across the target.

12. (original) The scanner of claim 10, further comprising a button that is coupled to
the beam-sweep mechanism and that is operable to:

cause the beam-sweep mechanism to rotate the mirror of the beam-reflector
assembly back and forth when pushed; and

cause the beam-sweep mechanism to retain the mirror of the beam-reflector
assembly in or return the mirror to the home position when released.

13. (original) The scanner of claim 10, further comprising:
a button; and

a trigger mechanism coupled to the button and the beam-sweep mechanism and
operable to:

cause the beam-sweep mechanism to rotate the mirror of the beam-reflector
assembly back and forth only when the button is pushed a first predetermined
distance from a button-released position; and

cause the beam-sweep mechanism to return the mirror of the beam-reflector
assembly to the home position only when the button is released a second
predetermined distance from a button-pushed position.

14. (original) The scanner of claim 10, further comprising:
a button; and

a trigger mechanism coupled to the button and the beam-sweep mechanism and operable to:

cause the beam-sweep mechanism to initiate rotation of the mirror from the home position only when the button is pushed with at least a first predetermined force; and

cause the beam-sweep mechanism to return the mirror to the home position only when the pushing force on the button drops to or below a second predetermined force.

15. (original) A scanner, comprising:

a beam generator operable to generate a scan beam;

a beam-reflector assembly having a first magnet and operable to sweep the scan beam; and

a beam-sweep mechanism having a second magnet configured for mechanical movement between a first position in which the second magnet attracts the first magnet and a second position in which the second magnet repels the first magnet.

16. (original) The scanner of claim 15 wherein the beam generator comprises a laser diode.

17. (original) The scanner of claim 15 wherein the beam-reflector assembly comprises a rotatable mirror.

18. (original) The scanner of claim 15, further comprising a button coupled to the beam-sweep mechanism, the button designed to be pushed with an operator's thumb.

19. (original) The scanner of claim 15 wherein the beam-sweep mechanism causes the beam-reflector assembly to sweep the scan beam when the second magnet repels the first magnet.

20. (currently amended) The scanner of claim 15 wherein the beam-sweep mechanism causes the beam-reflector assembly to remain in or to move to a home position when the second magnet ~~repels~~ attracts the first magnet.

21. (previously presented) A method, comprising:
generating a scan beam; and
sweeping the beam across a target by moving a magnet to exert a first magnetic force and only the first magnetic force on a beam reflector, the magnet being unattached to the beam reflector.

22. (original) The method of claim 21, further comprising reading a return beam reflected from the target by exerting the first magnetic force on the beam reflector.

23. (currently amended) The method of claim 21 wherein sweeping the beam comprises exerting the first magnetic force to rotate the beam reflector back and forth about a shaft.

24. (currently amended) The method of claim 21 wherein sweeping the beam comprises exerting the first magnetic force to rotate the beam reflector back and forth about a shaft and to dampen the rotation.

25. (previously presented) The method of claim 21, further comprising returning the beam reflector to a home position after sweeping the beam by moving the magnet to exert a second magnetic force on the beam reflector.

26. (currently amended) A method, comprising:
retaining a mirror in a home position with an attractive magnetic force from a magnet;
rotating the mirror back and forth about a shaft with a repelling magnetic force from the magnet to sweep a scan beam across a target and to direct a return beam reflected from the target to a beam detector; and

returning the mirror to the home position with the attractive magnetic force from the magnet.

27. (original) The method of claim 26 wherein:

rotating the mirror comprises pushing a button; and

returning the mirror comprises releasing the button.

28. (original) The method of claim 26 wherein:

rotating the mirror comprises rotating the mirror only when a button is pushed a first predetermined distance from a button-released position; and

returning the mirror comprises returning the mirror to the home position only when the button is released a second predetermined distance from a button-pushed position.

29. (original) The method of claim 26 wherein:

rotating the mirror comprises rotating the mirror only when a button is pushed with at least a first predetermined force; and

returning the mirror comprises returning the mirror to the home position only when the pushing force on the button drops to or below a second predetermined force.

30. (previously presented) The scanner of claim 1 wherein the beam-sweep mechanism is further operable to deactivate the beam-reflector assembly by exerting a second magnetic force on the first magnet with the second magnet.

31. (previously presented) The scanner of claim 1 wherein the first magnetic force comprises a repelling force.

32. (previously presented) The scanner of claim 1 wherein:

the beam-sweep mechanism is further operable to deactivate the beam-reflector assembly by exerting a second magnetic force on the first magnet with the second magnet;

the first magnetic force comprises a repelling force; and

the second magnetic force comprises an attractive force.

33. (previously presented) A scanner, comprising:
a beam generator operable to generate a scan beam;
a beam-reflector assembly having a first magnet and operable to sweep the scan beam; and
a non-motorized beam-sweep mechanism having a permanent second magnet and operable to activate the beam-reflector assembly by exerting a first force on the first magnet with the second magnet.

34. (previously presented) The scanner of claim 33 wherein the beam-sweep mechanism is human powered.

35. (currently amended) The scanner of claim 33 wherein the beam-reflector assembly comprises a shaft and is operable to sweep the beam back and forth about the shaft a plurality of times in response to a single activation from the non-motorized beam-sweep mechanism.

36. (currently amended) A method, comprising:
retaining a mirror in a home position with an attractive magnetic force from a magnet, the mirror rotatable about an axis;
moving the magnet in a dimension that is substantially parallel to the axis such that the magnet exerts a repelling magnetic force on the mirror, the repelling magnetic force causing the mirror to rotate back and forth about a shaft such that the mirror sweeps a scan beam across a target and directs a return beam reflected from the target to a beam detector; and

moving the magnet in the dimension such that the magnet exerts the attractive magnetic force on the mirror, the attractive magnetic force causing the mirror to return to the home position.

37. (previously presented) The method of claim 36 wherein:

moving the magnet in a dimension that is substantially parallel to the axis such that the magnet exerts a repelling magnetic force on the mirror comprises moving the magnet in a plane that is substantially parallel to the axis; and

moving the magnet in the dimension such that the magnet exerts the attractive magnetic force on the mirror comprises moving the magnet in the plane.

38. (currently amended) A scanner, comprising:

a beam generator operable to generate a scan beam;

a beam detector operable to read a return beam reflected from a target;

a beam-reflector assembly having a mirror, a shaft, and a first magnet, the mirror operable to sweep the scan beam across the target; and

a beam-sweep mechanism having a second magnet configured for mechanical movement between a first position in which the second magnet attracts the first magnet and a second position in which the second magnet repels the first magnet, the beam-sweep mechanism operable to,

retain the mirror of the beam-reflector assembly in and return the mirror to a home position when the beam-sweep mechanism is in the first position, and

rotate the mirror of the beam-reflector assembly back and forth about the shaft in an underdamped manner when the beam-sweep mechanism is in the second position.

39. (currently amended) A scanner, comprising:

a beam generator operable to generate a scan beam;

a beam-reflector assembly having a first magnet and a shaft and operable to sweep the scan beam; and

a beam-sweep mechanism having a second magnet configured for mechanical movement between a first position in which the second magnet attracts the first magnet and a second position in which the second magnet repels the first magnet, the beam-sweep mechanism operable when in the first position to retain the mirror of the beam-reflector assembly in and return the mirror to a home position, the beam-reflector

assembly operable when in the second position to rotate the mirror of the beam-reflector assembly back and forth about the shaft in an underdamped manner.

40. (currently amended) A scanner, comprising:

a beam generator operable to generate a scan beam;

a beam-reflector assembly having a first magnet and a shaft and operable to sweep the scan beam; and

a beam-sweep mechanism having a second magnet configured for mechanical movement between a first position in which the second magnet exerts a first magnetic force on the first magnet and a second position in which the second magnet exerts a second magnetic force on the first magnet, the beam-sweep mechanism operable when in the first position to retain the mirror of the beam-reflector assembly in and return the mirror to a home position, the beam-reflector assembly operable when in the second position to rotate the mirror of the beam-reflector assembly back and forth about the shaft in an underdamped manner.

41. (currently amended) A method, comprising:

retaining a mirror in a home position with a first magnetic force from a magnet;

rotating the mirror back and forth about a shaft with a second magnetic force from the magnet to sweep a scan beam across a target and to direct a return beam reflected from the target to a beam detector; and

returning the mirror to the home position with the first magnetic force from the magnet.

42. (currently amended) A method, comprising:

moving a magnet into a first position to retain a mirror in a home position with a first magnetic force;

moving the magnet into a second position to rotate the mirror back and forth about a shaft with a second magnetic force to sweep a scan beam across a target with the mirror and to direct a return beam reflected from the target to a beam detector with the mirror; and

moving the magnet into the first position to return the mirror to the home position with the first magnetic force.

43. (previously presented) The method of claim 42 wherein:
the first magnetic force comprises an attractive magnetic force; and
the second magnetic force comprises a repelling magnetic force.

44. (new) A scanner, comprising:
a beam generator operable to generate a scan beam;
a beam-reflector assembly having a first magnet and operable to sweep the scan beam by rotating about an axis; and
a beam-sweep mechanism having a second magnet configured for mechanical movement in a dimension substantially parallel to the axis between a first position in which the second magnet attracts the first magnet and a second position in which the second magnet repels the first magnet.